```
EEEEEEEEEE  XX     XX    AAAAAA     MM      MM  PPPPPPP    LL                  EEEEEEEEEE  SSSSSSS
EEEEEEEEEE  XX     XX    AAAAAA     MM      MM  PPPPPPPP   LL                  EEEEEEEEEE  SSSSSSSS
EEEEEEEEEE  XX     XX    AAAAAA     MM      MM  PPPPPPP    LL                  EEEEEEEEEE  SSSSSSSS
EE           XX   XX    AA     AA   MMMM   MMMM  PP      PP  LL                EE             SS
EE           XX   XX    AA     AA   MMMM   MMMM  PP      PP  LL                EE             SS
EE           XX   XX    AA     AA   MMMM   MMMM  PP      PP  LL                EE             SS
EE            XX XX     AA     AA   MM MM MM MM  PP      PP  LL                EE             SS
EE            XX XX     AA     AA   MM MM MM MM  PP      PP  LL                EE             SS
EE            XX XX     AA     AA   MM  MMM  MM  PP      PP  LL                EE             SS
EEEEEEE        XX       AA     AA   MM      MM  PPPPPPP    LL                  EEEEEEE      SSSSSS
EEEEEEE        XX       AA     AA   MM      MM  PPPPPPP    LL                  EEEEEEE      SSSSSS
EEEEEEE        XX       AA     AA   MM      MM  PPPPPPP    LL                  EEEEEEE      SSSSSS
EE            XX XX    AAAAAAAAAA   MM      MM  PP         LL                  EE             SS
EE            XX XX    AAAAAAAAAA   MM      MM  PP         LL                  EE             SS
EE           XX   XX   AA     AA    MM      MM  PP         LL                  EE             SS
EE           XX   XX   AA     AA    MM      MM  PP         LL                  EE             SS
EE           XX   XX   AA     AA    MM      MM  PP         LL                  EE             SS
EEEEEEEEEE   XX     XX AA     AA    MM      MM  PP         LLLLLLLLLL  EEEEEEEEEE  SSSSSSSS
EEEEEEEEEE   XX     XX AA     AA    MM      MM  PP         LLLLLLLLLL  EEEEEEEEEE  SSSSSSSS
EEEEEEEEEE   XX     XX AA     AA    MM      MM  PP         LLLLLLLLLL  EEEEEEEEEE  SSSSSSSS
```

```
MM      MM    AAAAAA    IIIIII   LL           UU       UU    AAAAAA    FFFFFFFFFF
MM      MM    AAAAAA    IIIIII   LL           UU       UU    AAAAAA    FFFFFFFFFF
MMMM  MMMM   AA    AA     II     LL           UU       UU   AA    AA   FF
MMMM  MMMM   AA    AA     II     LL           UU       UU   AA    AA   FF
MM  MM  MM   AA    AA     II     LL           UU       UU   AA    AA   FF
MM  MM  MM   AA    AA     II     LL           UU       UU   AA    AA   FF
MM      MM   AA    AA     II     LL           UU       UU   AA    AA   FFFFFFFF
MM      MM   AAAAAAAAAA   II     LL           UU       UU   AAAAAAAAAA  FFFFFFFF
MM      MM   AAAAAAAAAA   II     LL           UU       UU   AAAAAAAAAA  FF
MM      MM   AA    AA     II     LL           UU       UU   AA    AA   FF      ....
MM      MM   AA    AA     II     LL           UU       UU   AA    AA   FF      ....
MM      MM   AA    AA   IIIIII   LLLLLLLLLL   UUUUUUUUUU   AA    AA   FF      ....
MM      MM   AA    AA   IIIIII   LLLLLLLLLL   UUUUUUUUUU   AA    AA   FF      ....

    CCCCCCCC    000000    MM      MM
    CCCCCCCC    000000    MM      MM
  CC           00    00   MMMM  MMMM
  CC           00    00   MMMM  MMMM
  CC           00    00   MM  MM  MM
  CC           00    00   MM  MM  MM
  CC           00    00   MM      MM
  CC           00    00   MM      MM
  CC           00    00   MM      MM
  CC           00    00   MM      MM
  CC           00    00   MM      MM
    CCCCCCCC    000000    MM      MM
    CCCCCCCC    000000    MM      MM
```

```
$ !++
$ !
$ !   MAILUAF.COM - Modify SYS$SYSTEM:VMSMAIL.DAT
$ !
$ !   ABSTRACT:  Sample command procedure to modify
$ !             SYS$SYSTEM:VMSMAIL.DAT
$ !
$ !             This command procedure will prompt
$ !             the user for a command.  The valid
$ !             commands are:
$ !
$ !             ADD username    - Add a new user to SYS$SYSTEM:VMSMAIL.DAT
$ !             CANCEL username - Cancel mail forwarding for username
$ !             EXIT            - Exit from this procedure
$ !             HELP            - Type help message
$ !             MODIFY username - Modify mail forwarding address for username
$ !             REMOVE username - Remove username from SYS$SYSTEM:VMSMAIL.DAT
$ !             SHOW username   - Display mail information about username
$ !             LIST            - List forwarding addresses for all users
$ !
$ !   REQUIRED PRIVILEGES:
$ !             BYPASS
$ !
$ !
$ !   IMPLICIT OUTPUT:
$ !             SYS$SYSTEM:VMSMAIL.DAT will be created if it does
$ !             not exsist.
$ !
$ !
$ !--
$ if = "IF"
$ inquire = "INQUIRE"
$ open = "OPEN"
$ goto = "GOTO"
$ write = "WRITE"
$ create = "CREATE"
$ type = "TYPE"
$ read = "READ"
$ close = "CLOSE"
$ exit = "EXIT"
$ ask = "inquire/nopunctuation"
$ prev_priv = f$setprv("SYSPRV")
$ sysmai = "SYS$SYSTEM:VMSMAIL.DAT"
$ open /share=write /read /write /error=no_file f1 'sysmai'
$ goto file_open
$no_file:
$ write sys$output sysmai," not found...creating new file"
$ create /fdl=sys$input 'sysmai'          !Create new VMSMAIL.DAT
IDENT   VMS MAIL Information data file

FILE
        ALLOCATION              10
        BEST_TRY_CONTIGUOUS     yes
        BUCKET_SIZE             2
```

```
          CONTIGUOUS                 no
          EXTENSION                  10
          GLOBAL_BUFFER_COUNT        0
          ORGANIZATION               indexed
          OWNER                      [001,004]
          PROTECTION                 (system:RWE, owner:RWE, group:, world:)

RECORD
          BLOCK_SPAN                 yes
          CARRIAGE_CONTROL           none
          FORMAT                     variable
          SIZE                       0

AREA 0
          ALLOCATION                 10
          BEST_TRY_CONTIGUOUS        yes
          BUCKET_SIZE                2
          CONTIGUOUS                 no
          EXTENSION                  10

KEY 0
          CHANGES                    no
          DATA_KEY_COMPRESSION       yes
          DATA_RECORD_COMPRESSION    yes
          DATA_AREA                  0
          DATA_FILL                  100
          DUPLICATES                 no
          INDEX_AREA                 0
          INDEX_COMPRESSION          yes
          INDEX_FILL                 100
          LEVEL1_INDEX_AREA          0
          NULL_KEY                   no
          PROLOGUE                   3
          SEG0_LENGTH                31
          SEG0_POSITION              0
          TYPE                       string
$ open /share=read /read /write f1 'sysmai'
$file_open:
$ on control_y then goto done
$ !
$ ! Main loop.  Get command and username then dispatch
$ !
$do_command:
$ ask line "MAILUAF> "
$ line:='line
$ if line .eqs. "" then goto done
$ t1 = f$locate(" ",line)
$ command = f$extract(0,t1,line)
$ user = f$extract(t1+1,31,line)
$ if f$locate(command,"HELP") .eq. 0 then goto help_user
$ if f$locate(command,"EXIT") .eq. 0 then goto done
$ if f$locate(command,"LIST") .eq. 0 then goto list_users
$ if user .eqs. "" then goto syntaxerr
$ fulluser[0,31]:='user'
$ if f$locate(command,"ADD") .eq. 0 then goto add_user
$ if f$locate(command,"CANCEL") .eq. 0 then goto cancel_user
```

```
$ if f$locate(command,"MODIFY") .eq. 0 then goto modify_user
$ if f$locate(command,"REMOVE") .eq. 0 then goto remove_user
$ if f$locate(command,"SHOW") .eq. 0 then goto show_user
$help_user:
$ type sys$input:

 ADD username          Add a new user
 CANCEL username       Cancel forwarding for a user
 EXIT                  Exit from MAIUAF
 HELP                  Type this
 MODIFY username       Modify forwarding address for a user
 REMOVE username       Remove a user completely
 SHOW username         Show MAIL information about user
 LIST                  List forwarding addresses for all users in VMSMAIL.DAT

$ goto do_command
$add_user:
$ read /index=0 /err=add_10 /key="'"'fulluser'"'" f1 record
$ write sys$output "User '",user," record already exists"
$ goto do_command
$add_10:
$ s1 = "'"'record'"'"
$ if f$length(s1) .ne. 0 then $ delete/symbol record
$ record[0,31]:='user'
$ record[248,288]=0
$ ask address "Forwarding address? "
$ t1 = f$length(address)
$ record[536,8]='t1'
$ record[68,'t1']:='address'
$ write f1 record
$ write sys$output "User ",user," added"
$ goto do_command
$cancel_user:
$ read /index=0 /err=nosuchuser/key="'"'fulluser'"'" f1 record
$ address = f$extract(68,255,record)
$ addr_length = f$cvui(67*8,8,record)
$ address := 'address'
$ naddress = f$extract(0,addr_length,address)
$ t2 = f$length(address)
$ t2 = 't2' - 'addr_length'
$ if addr_length .eq. 0 then goto show_10
$ write sys$output "User ",user,", forwarding address is ",naddress
$ ask yn "Cancel mail forwarding? "
$ if .not. yn then goto do_command
$ record[536,8]=0
$ record[68,255] := "'"'f$extract(68+addr_length,255-addr_length,record)'"'"
$ record = f$extract(0,68+'t2',record)
$ write /update f1 record
$ goto do_command
$list_users:
$ close f1
$ open /share=write /read /write f1 'sysmai'
$ write sys$output ""
$ write sys$output "Username                              Forwarding address"
$ write sys$output "--------                              ------------------"
$list_10:
```

```
$ read /end=do_command f1 record
$ user = f$extract(0,31,record)
$ addr_length = f$cvui(67*8,8,record)
$ address = f$extract(68,255,record)
$ address := 'address'
$ address = f$extract(0,addr_length,address)
$ write sys$output user,"          ",address
$ goto list_10
$ goto do_command
$modify_user:
$ read /index=0 /err=nosuchuser /key="""'fulluser'""" f1 record
$ address = f$extract(68,255,record)
$ addr_length = f$cvui(67*8,8,record)
$ naddress = f$extract(0,addr_length,address)
$ t2 = f$length(address)
$ if addr_length .ne. 0 then goto xx1
$ write sys$output "User ",user," does not have forwarding enabled"
$ goto xx2
$xx1:
$ write sys$output "Current forwarding address is ",naddress
$xx2:
$ ask naddress "New forwarding address? "
$ if naddress .eqs. "" then goto do_command
$ address = f$extract(addr_length,t2-addr_length,address)
$ t1 = f$length(naddress)
$ record[536,8]='t1'
$ record[68,255]:="""'naddress''''address'"""
$ record = f$extract(0,68+t1+t2,record)
$ write /update f1 record
$ write sys$output "User ",user," modified"
$ goto do_command
$nosuchuser:
$ write sys$output "User ",user," record does not exist"
$ goto do_command
$remove_user:
$ read /index=0 /err=nosuchuser/key="""'fulluser'""" f1 record
$ address = f$extract(68,255,record)
$ addr_length = f$cvui(67*8,8,record)
$ address := 'address'
$ if addr_length .eq. 0 then goto xx0
$ address = f$extract(0,addr_length,address)
$ write sys$output "User ",user,", forwarding address is ",address
$ goto xx9
$xx0:
$ write sys$output "User ",user," does not have forwarding enabled"
$xx9:
$ ask yn "Remove? "
$ if .not. yn then goto do_command
$ read /index=0/key="""'fulluser'""" /delete f1 record
$ goto do_command
$show_user:
$ read /index=0 /err=nosuchuser /key="""'fulluser'""" f1 record
$ address = f$extract(68,255,record)
$ addr_length = f$cvui(67*8,8,record)
$ fnmlng=f$cvui(66*8,8,record)
$ dirlng=f$cvui(65*8,8,record)
```

```
$ address := 'address'
$ full_name := ""'f$extract(68+addr_length,fnmlng,record)'"
$ dir_spec  = f$extract(addr_length+fnmlng,dirlng,address)
$ if dirlng .eq. 0 then goto no_dir
$ write sys$output "User ",user,", MAIL subdirectory is ",dir_spec
$ goto test_full_name
$no_dir:
$ write sys$output "User ",user," did not specify a MAIL subdirectory"
$test_full_name:
$ if fnmlng .eq. 0 then goto no_pers_name
$ write sys$output "User ",user,", MAIL personal name is ",full_name
$ goto check_forward
$no_pers_name:
$ write sys$output "User ",user," does not have a MAIL personal name."
$check_forward:
$ if addr_length .eq. 0 then goto show_10
$ address = f$extract(0,addr_length,address)
$ write sys$output "User ",user,", forwarding address is ",address
$ goto do_command
$show_10:
$ write sys$output "User ",user," does not have forwarding enabled"
$ goto do_command
$syntaxerr:
$ write sys$output "Command syntax error"
$ goto do_command
$done:
$ close f1
$ prev_priv = f$setprv(prev_priv)
$ exit
```

MAILCVT
COM

SYSGTTSTR
MSG

EXCREQ
R32

EXCCOPY
LIS

USSLNK
COM

EXCDEFS
SDL

EXCLIB
B32

EXCCLDTBL
LIS

MAILUAF
COM

USSTSTLNK
COM

EXCHNG

XATEST
COM

EXCHANGE
MAP

LABIO
OPT

MSCPMOUNT
COM

LABIOCIN
OPT

EXCCMD
LIS

DRCOPY
PRM